DKHARIYAL, Ch.D.; ZHIGACH, K.F.; MALININA, A.I.; TIMOKHIN, I.M.;
FINKEL'SHTEYN, M.Z.

Factors influencing the effectiveness of cellulose carboxymethylation. Zhur.prikl.khim. 37 no. 5:1099-1105 My '64. (MIRA 17:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni I.M.Gubkina.

(1)

41413

S/069/62/024/005/004/010
B106/B186

15.7460

AUTHORS: Zhigach, K. F., Luft, B. D., Finkel'shteyn, M. Z., Goloshchapova, I. S., Timokhin, I. M., Chuvilina, L. B.

TITLE: Investigation of aqueous alundum suspensions stabilized by carboxy-methyl cellulose for electrophoretic coating

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 5, 1962, 558 - 564

TEXT: The effect of several physicochemical characteristics of sodium carboxy-methyl cellulose (Na-CMC) on its efficiency as a stabilizer for aqueous suspensions of alundum for electrophoretic coating was studied. The sedimentation stability of the suspension is raised with increasing degrees of polymerization, etherification, and Na-CMC concentration in the suspension. Greater thickness of coatings is obtained with an increasing degree of polymerization of Na-CMC, while increasing etherification resulted in thinner coatings. The homogeneity of coatings improves with a lower degree of polymerization, and a higher degree of etherification and Na-CMC concentration. The anodic gas evolution, which is very detrimental to the quality of coatings, increases with etherification and Na-CMC concentration

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in the suspension, and is reduced by an increasing degree of polymerization. The resistance of coatings to 0.05 N NaOH increases with concentration, degree of polymerization, and etherification of Na-CMC. Electron-microscopic measurements showed that the stabilizing effect of Na-CMC is based on the adsorption of high-molecular ions $(CMC)^{-\gamma}$ to the alundum particles, and on the formation of structurized protecting gels which prevent the joining of the individual particles. The best coatings are obtained by stabilizing the alundum suspensions with purified Na-CMC having a degree of polymerization of 500-550 and a degree of etherification of 70-80 in a concentration of 0.3-0.5% of the aqueous phase. The results were used in developing a new industrial technique of producing electrophoretic insulating coatings from aqueous alundum suspensions on parts of electron tubes. Thus, the use of toxic and inflammable organic solvents and of nitrocellulose can be abandoned. There are 8 figures and 1 table. The English-language reference is: L. E. Grey, Electronic. Eng. 26, 402, 1954.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. I. M. Gubkina (Moscow Institute of Petrochemical and Gas Industry imeni I. M. Gubkin)

FINKEL'SHTEYN, M.Z.; DKHARIYAL, Ch.D.; TIMOKHIN, I.M.; MALININA, A.I.

Effect of successive additions of reagents and the degree of polymerization of cellulose on the degree of esterification and solubility of carboxymethylcellulose in water. Izv. vys. ucheb. zav.; neft' i gaz 5 no.11:31-34 '62. (MIRA 17:6)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.

DKHARIYAL, Ch.D.; MALININA, A.I.; TIMOKHIN, I.M.; FINKEL'SHTEYN, M.Z.

Effect of some factors on the reaction rate of carboxymethylation of cellulose and the homogeneity of carboxymethylcellulose. Zhur. prikl. khim. 36 no.11:2513-2517 N '63.
(MIRA 17:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni I.M. Gubkina.

BUNIN, A.Ya., kand.med.nauk; YAKOVLEV, A.A., nauchnyy sotrudnik;
POZHARSKAYA, A.M., kand.khim.nauk; CHERNIK, L.Ye., nauchnyy
sotrudnik; FINKEL'SHTEYN, M.Z., kand.khim.nauk; TIMOKHIN, I.M.,
kand.khim.nauk

Method for increasing and prolonging the hypotensive action of pilocarpine. Vest.oft. no.4:63-65 '61. (MIRA 14:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgol'tsa (for Bunin, Yakovlev). 2. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (for Pozharskaya, Chernik). 3. Institut neftekhimicheskoy i gazovoy promyshlennosti imeni I.M. Gubkina (for Finkel'shteyn, Timokhin).

(PILOCARPINE)

TIMOKHIN, I.M.; FINKEL'SHTEYN, M.Z.

Methods of analysis of carboxymethylcellulose ethers. Zhur.prikl.khim. 36 no.2:415-423 F '63. (MIRA 16:3)

(Cellulose)

ACC NR: AP6030903 (A,N) SOURCE CODE: UR/0080/66/039/008/1849/1852

AUTHOR: Dzhariyal, Ch. D.; Malinina, A. I.; Timokhin, I. M.; Finkol'shteyn, M. Z.

ORG: Moscow Institute of the Petrochemical and Gas Industry imeni I. M. Gubkin (Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti)

34
B

TITLE: Effect of the conditions of preparation of carboxymethylcellulose (CMC) on the degree of its polymerization

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 8, 1966, 1849-1852

TOPIC TAGS: cellulose, polymer degradation, polymerization degree

ABSTRACT: A study of the effect of the mercerization temperature showed that as the latter rises, the degree of polymerization of carboxymethylcellulose (CMC) diminishes. This is attributed to the high rate of degradation of cellulose during its mercerization at higher temperatures. In the process of carboxymethylation of cellulose, a rise in the reaction temperature to 80°C reduces the degradation of the CMC obtained. At 95°, however, the degradation is more pronounced. The degree of polymerization of CMC decreases very appreciably with rising content of free NaOH in the reaction mixture. It does not change with changing cellulose/$ClCH_2COOH$ ratio and changes only slightly with the water/cellulose ratio. Ultrasonic waves (19.45 kc) had no effect on the polymerization. It is shown that the degree of polymerization of CMC can be determined in unpurified preparations, since the impurities they contain do not have any

Card 1/2 UDC: 547.458.81+541.64

L 08460-67

ACC NR: AP6030903

appreciable effect on the concentration of the low-molecular electrolyte in a 1.5 N NaOH solution. Orig. art. has: 8 tables.

SUB CODE: 07/ SUBM DATE: 06Jul64/ ORIG REF: 002/ OTH REF: 001

DKHARIYAL, Ch.D.; ZHIGACH, K.F.; MALININA, A.I.; TIMOKHIN, I.M.;
FINKEL'SHTEYN, M.Z.

Effect of production techniques of carboxymethylcellulose on its etherification and solubility in water. Izv.vys.ucheb. zav.; neft' i gaz 5 no.2:29-34 '62. (MIRA 15:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.
(Cellulose)

FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.

Obtaining carboxymethyl esters of cellulose from poor grades of raw cellulose. Izv. vys. ucheb. zav.; neft' i gaz 3 no.12:35-37 '60. (MIRA 14:10)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.

(Cellulose)

(Oil well drilling fluids)

ZHIGACH, K.F., doktor khimicheskikh nauk; FINKEL'SHTEYN, M.Z., kand. khimicheskikh nauk; MOGILEVSKIY, Ye.M., kand.tekhn.nauk; TIMOKHIN, I.M.

Water-soluble and alkali-soluble cellulose esters. Khim.nauka i prom. 4 no.6:718-725 '59. (MIRA 13:8)
(Cellulose esters)

FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.; MUKHAMEDOV, Kh.U.

Quantitative determination of the sodium salt content of carboxymethyl cellulose. Izv.vys.ucheb.zav.; neft' i gaz 1 no.12: 45-50 '58. (MIRA 12:4)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad.I.M.Gubkina i sovnarkhoz Ferganskogo ekonomicheskogo rayona.
(Cellulose) (Oil well drilling fluids)

TIMOKHIN, I. M., Cand Chem Sci -- (diss) "Study of the colloidochemical properties of carboxymethyl ethers of cellulose in relation to their application in the petroleum, the petrochemical, and other fields of industry." Moscow, 1960. 14 pp; (Inst of Petrochemical Synthesis of the Academy of Sciences USSR); 200 copies; price not given; (KL, 28-60, 158)

5(3),17(3)

AUTHORS: Zhigach, K. F., Finkel'shteyn, M. Z., Timokhin, I. M., Malinina, A. I. SOV/20-123-3-25/54

TITLE: Carboxy-Methyl Cellulose Preparations for Blood-Substituting Solutions (Polucheniye preparatov karboksimetiltsellyulozy dlya krovezameshchayushchikh rastvorov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 3, pp 471-474 (USSR)

ABSTRACT: The sodium salt of the compound under review (Na-CMC) does not considerably change the blood composition if used as a plasma substitute in animals (Ref 1), even not in considerable excess. Na-CMC, however, was negatively characterized since it causes hypertension on intravenous injection. It was useful to try the synthesis of such preparations which also would yield good results with regard to their hemodynamic properties.
CMC preparations can be produced with different polymerization degree (PD) and esterification degree (ED). This work was initiated by the institute mentioned in the "Association" together with Tsentral'nyy institut gematologii i perelivaniya krovi = TsOLIPK (Central Institute of Hematology and Blood Transfusion) in 1953.

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Carboxy-Methyl Cellulose Preparations for Blood-Substituting Solutions SOV/20-123-3-25/54

CMC preparations with different PD- and ED-values were obtained by esterification of pulverized alkali cellulose with sodium monochlorine acetate. The quantity of the esterifying agent depends on the PD of the original alkali cellulose. Table 1 shows that, at the same ratio of the reagents, with a lesser PD of alkali cellulose higher EDs are attained. The desired ED can be obtained by a limitation of the sodium monochlorine acetate consumption, as this reduces the PD of the initial cellulose. For the synthesis of blood-substituting solutions only chemically pure CMC preparations can be used. An instruction for the purification is given. In order to obtain a complete solubility the ED of CMC must be high; values of 70-85 do not influence the blood-substituting properties of CMC (Ref 5). From among the CMC preparations tested (PD of 240 up to 58) those with values between 70 and 100 were the most efficient ones (3% aqueous solutions with a viscosity 3.5 - 5.0 centipoises; contrary to Ref 6). The desired preparations with a low PD can be obtained by a) destruction of the initial cellulose and alkaline cellulose,respectively, or b) by additional splitting of finished CMC preparations. Only the mode b) can be recommended.

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Carboxy-Methyl Cellulose Preparations for Blood-Substituting Solutions

SOV/20-123-3-25/54

In order to accelerate the destruction process of the alkali cellulose that requires a lot of time, by atmospheric oxygen (Table 2), hydrogen peroxide is added to the mercerization bath or to the alkali cellulose during the pulverization. The results of the experiments are given in table 3. Small quantities H_2O_2 (up to 1.5%) do not influence the blood-substituting proportios of CMC. Large amounts, if added directly to alkali cellulose, turn CMC preparations toxic, and animals are killed if they are intravenously injected. The increase in the toxic effect cannot be explained by a modification of the average chemical composition. Most probably it is a consequence of the unequal destruction process as well as of the agglomeration of a certain quantity of highly oxidized cellulose by which CMC preparations become toxic. For this reason, H_2O_2 must be used very carefully for the above-mentioned purpose. For the purpose of reducing of the PD below 100 the finished product was hydrolytically cleft with aqueous HCl solution at 65-70°. The duration of this process depends on the initial PD of CMC preparations. Good

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Carboxy-Methyl Cellulose Preparations for Blood-Substituting Solutions

SOV/20-123-3-25/54

results were yielded with CMC preparations of a relatively low molecular weight (PD about 130). The investigations performed suggest new ways of synthesizing Na-CMC preparations with blood-substituting properties. There are 5 tables and 9 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy neftyanoy institut im. I. M. Gubkina (Moscow Petroleum Institute imeni I. M. Gubkin)

PRESENTED: July 3, 1958, by A. V. Topchiyev, Academician

SUBMITTED: July 1, 1958

Card 4/4

DKHARIYAL, Ch.D.; TIMOKHIN, I.M.; FINKEL'SHTEYN, M.Z.

Production of cellulose carboxymethyl ethers. Zhur.prikl.khim. 35 no.2:429-440 F '62. (MIRA 15:2)
(Cellulose)

TIMOKHIN, I.M.; FINKEL'SHTEYN, M.Z.

Investigation of the colloidal and chemical properties of preparations and fractions of carboxymethylcellulose. Trudy MINKHiGP no.28:26-43 '60. (MIRA 14:4)

(Cellulose)

ZAYTSEVSKAYA, M.M.; FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.

Use of the sodium salt of carboxymethylcellulose in the manufacture of wallpaper. Bum. prom. 34 no.11:9-10 N '59. (MIRA 13:3)

1.Moskovskiy filial TSentral'nogo nauchno-issledovatel'skogo instituta tsellyuloznoy i bumazhnoy promyshlennosti (for Zaytsevskaya). 4.Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. I.M. Gubkina (for Finkel'shteyn,,Timokhin).
(Wallpaper) (Cellulose)

Timokhin, I. M.

11(2,4) PHASE I BOOK EXPLOITATION SOV/2536

Moscow. Institut neftekhimicheskoy i gasovoy promyshlennosti.

Problemy nefti i gaza (Oil and Gas Problems) Moscow, Gostoptekhizdat, 1959. 362 p. (Series: Its: Trudy, vyp 24) Errata slip inserted. 2,000 copies printed.

Sponsoring Agency: Ministerstvo vysshego obrazovaniya SSSR.

Exec. Ed.: G. F. Morgunova; Tech. Ed.: I. G. Fedotova; Editorial Board: K. F. Zhigach, Professor (Resp. Ed.), I. M. Murav'yev, Professor, A. A. Tikhomirov, Candidate of Economic Sciences, V. N. Vinogradov, Candidate of Technical Sciences, M. M. Charygin, Professor, F. F. Dunayev, Professor, I. A. Charnyy, Professor, V. N. Dakhnov, Professor, G. M. Panchenkov, Professor,

PURPOSE: This collection of articles is intended for specialists in the petroleum and gas industry. It will also be of interest to scientific research institutes, teachers and students of vuzes.

COVERAGE: This collection of articles reviews problems connected with natural and synthetic gas production. A number of articles are devoted to the study of regional oil- and gas-bearing zones, the crystalline beds underlying the Volga-Urals petroliferous region, tectonics of the Caspian depression, seismic prospecting, oil well logging, development of oil and gas fields, petroleum-bearing formations and their physicochemical characteristics, and petroleum engineering. Other articles deal with gas turbine engines and their possible use in the oil and gas industry, the production of carboxymethylcellulose compounds, the application of ionic exchange tars to the organic catalysis, continuous coking of heavy petroleum residues, (fluidization), the improvement of lube oil production, and the influence of acid esters on properties of lubricating oil and grease. The book contains a number of photographs, tables, flow sheets, and diagrams, among which those relating to coal gasification and conversion of heavy petroleum residues over a fluidized bed catalyst deserve special attention. References accompany individual articles.

Bichantay, R. N. Gas Turbine Engines and Prospects of Utilizing Them in Petroleum and Gas Industry 246

Zhigach, K. F., M. Z. Finkel'shteyn, I. M. Timokhin, and Ye. M. Mogilevskiy. Study of Physicochemical Properties of Fractions and Low Polymerization Compounds of Carboxymethylcellulose, and Their Production 257

Topchiyev, A. V., Ya. M. Paushkin, I. F. Bayev, M. V. Kurashev, and Q. I. Shuleshov. Present State of the Synthesis of Benzene Homologs and Their Chemical Processing 269

Isagulyants, V. I. Ionic Exchange Tars and Their Application to Organic Catalysis 286

Gurvich, V. L. (Deceased), A. I. Skoblo, Ye. V. Smidovich, N. P. Zaytseva, M. S. Kazanskaya, V. N. Petrov, A. S. Suvorov, and A. I. Shcherbakov. The Process of Continuous Coking of Heavy Petroleum Residues Carried Out Over a Powdered Coke 298

Chernozhukov, N. I., I. P. Lukashevich, A. Z. Bikkulov, O. G. Susanina, L. P. Kazakova, M. F. Sadchikova, [illegible] Shchegrova, L. M. Markova, [illegible], [illegible], and G. Glazov. Solubility of Hydrocarbon Oils in Organic Solvents and Possibilities of Improving Lube Oil Manufacturing 311

Velikovskiy, D. S. Synthetic Acid Esters and Their Influence on Properties of Lube Oil and Grease 341

3/2

FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.; MOGILEVSKIY, Ye.M.; MALININA, A.I.

Obtaining sodium chloroacetate for the production of carboxymethyl ethers of cellulose. Izv.vys.ucheb.zav. neft' i gaz 2 no.12:43-47 '59. (MIRA 13:5)

1. Moskovskiy institut neftikhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.
(Cellulose) (Acetic acid) (Oil well drilling fluids)

TIMOKHIN, I.M.

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SOV/63-4-6-5/37

15.9530

AUTHORS: Zhigach, K. F. (Doctor of Chemical Sciences), Finkelshteyn, M. Z. (Candidate of Chemical Sciences), Mogilevskiy, Ye. M., (Candidate of Technical Sciences) Timokhin, I. M.

TITLE: Water- and Alkali-Soluble Cellulose Ethers

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 6, pp 718-725 (USSR)

ABSTRACT: This is a review of the literature dealing with water- and alkali-soluble cellulose ethers used in the preparation of thickening and stabilizing agents, glues, etc. The solubility of carboxymethylcellulose is determined basically by the degree of its etherification γ and the degree of polymerization DP. The difficulty in obtaining highly substituted carboxymethylcellulose compounds was explained by the fact that in methylation in alkaline and neutral media, the secondary hydroxyl groups have the highest reactivity, and that both secondary hydroxyl groups can be

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ZHIGACH, K.F.; FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.; MOGILEVSKIY, Ye.M.

Obtaining fractions and low polymer preparations from carboxymethylcellulose and studying their physicochemical properties. Trudy MINKHiGP no.24:257-268 '59. (MIRA 13:3)
(Cellulose)

ZHIGACH, K.F.; FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.

Effect of a low molecular preparation and gel-type fraction of the carboxymethyl cellulose on the stabilizing property of carboxymethyl esters of cellulose in drilling muds. Izv. vys. ucheb. zav.; neft' i gaz 2 no.6:27-31 '59. (MIRA 12:10)

1.Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. I.M. Gubkina.

(Cellulose) (Oil well drilling fluids)

5(4) SOV/20-126-5-31/69

AUTHORS: Zhigach, K. F., Finkel'shteyn, M. Z., Timokhin, I. M.

TITLE: The Structural Viscosity of Aqueous Solutions of Carboxymethyl Cellulose (Strukturnaya vyazkost' vodnykh rastvorov karboksimetiltsellyulozy)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 5, pp 1025-1028 (USSR)

ABSTRACT: A previous paper (Ref 1) pointed out that carboxymethyl cellulose (CMC) exhibits anomalous viscosity at concentrations exceeding 0.1% in aqueous solutions. Now the effect of the individual fractions of CMC with varying degree of polymerization are investigated with respect to the structure of the solution. Four samples were selected: (1) high-molecular, (2) gel-shaped, (3) sol-shaped, and (4) low-molecular CMC (Table 1). The viscosities measured at different velocity gradient G (viscosimeter by Pinkevich) confirm F. Höppler's opinion (Refs 2,3), i.e., the viscosity of high-molecular CMC depends on G, and this dependence increases with increasing concentration. Sample 2 shows the highest degree of anomaly, whereas sample 4 exhibits the least dependence on G (Table 2). Accord-

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The Structural Viscosity of Aqueous Solutions of Carboxymethyl Cellulose SOV/20-126-5-31/69

ing to Pasynskiy and Rabinovich (Ref 4) this structural viscosity can be represented by the tangent of the angle of inclination α in the coordinate system η - lgG. Table 3 gives the values for tgα, and besides the calculated dynamical shearing stress ϑ. It is concluded that the structural viscosity is caused by the gel fraction and the interaction of the gel particles. The attempt was made to eliminate the interaction of gel particles by the addition of sample 3 or 4 and by adsorption of the low-molecular particles to the gel particles. This was a success as figures 2,3,4 and table 5 show. Only at high concentrations of sample 4 viscosity increases again, which is explained by complete saturation of the gel particles. Thus, the increased concentration of the CMC becomes effective. The results obtained show that by a proper arrangement of CMC fractions it is possible to control the properties in the desired way. There are 4 figures, 5 tables, and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti im. I. M. Gubkina (Institute of Petroleum-chemical and Gas Industry imeni I. M. Gubkin)

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ZHIGACH, K.F.; FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.; MALININA, A.I.

Carboxymethylcellulose preparations for blood substitute solutions.
Dokl.AN SSSR 123 no.3:471-474 N '58. (MIRA 11:12)

1. Moskovskiy neftyanoy institut imeni I.M.Gubkina. Predstavleno akademikom A.V.Topchiyevym.
(CELLULOSE) (BLOOD PLASMA SUBSTITUTES)

ZHIGACH, K.F.; FINKEL'SHTEYN, M.Z.; TIMOKHIN, I.M.; MALININA, A.I.

Preparation of carboxylmethylcellulose fractions and investigation of their physicochemical properties. Dokl.AN SSSR 123 no.2:289-291 N '58. (MIRA 11:12)

1. Moskovskiy neftyanoy institut imeni I.M. Gubkina. Predstavleno akademikom A.V. Topchiyevym.
(Cellulose)

5(1,3) SOV/20-123-2-22/50

AUTHORS: Zhigach, K. F., Finkel'shteyn, M. Z., Timokhin, I. M., Malinina, A. I.

TITLE: Production of Carboxy-Methyl Cellulose Fractions and Investigation of Its Physical and Chemical Properties (Polucheniye i issledovaniye fiziko-khimicheskikh svoystv fraktsiy karboksimetiltsellyulozy)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 289-291 (USSR)

ABSTRACT: This water soluble sodium salt of the cellulose carboxy-methyl ester (CMC) has found widespread use in the last years as a stabilizer, emulsifier, active addition to synthetic detergents, as a glue etc. (Refs 1,2). CMC is a complex polydisperse product consisting of various fractions that differ from each other by their chemical composition (Ref 3) and their physical and chemical properties. CMC can be produced with different values of the esterification and polymerization. Therefore not every CMC type is suited for the purpose. Only single types can be practically used in the one or other branch of industry: this must be determined in every single case. The connection

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Production of Carboxy-Methyl Cellulose Fractions and Investigation of Its Physical and Chemical Properties

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between the chemical composition of the CMC samples and their properties and behaviour has remained unexplained until now. These samples almost ever contain a certain amount of small fibers that are difficult to solve and are capable of swelling, the so-called gel-like phase, the content of which can influence in a high degree the properties (especially the rheological properties, Ref 4) of CMC solutions. For these reasons the authors wanted to close this gap. Four samples of CMC were chosen as objects: a) That used for stabilizing loam solutions in drilling (Refs 2,5), b) That serving for the stabilization of silicate salt solutions when drilling into water-endangered and easily sliding soft rocks (Ref 2), and as a glue (Ref 6). c) German samples of the type VHR, d) A special CMC preparation of low viscosity. Besides its fractionation by means of methanol or acetone samples a - c are separated into the gel- and sol-like phases by centrifuging. I The viscosity, II the stabilizing effect were determined of the fractions obtained. The viscosity of the aqueous solutions of CMC above 0.1% does not obey the Newton law. In the 0.05% solutions investigated

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Production of Carboxy-Methyl Cellulose Fractions and Investigation of Its Physical and Chemical Properties

the viscosity anomaly was almost completely lacking. The stabilizing effect of the CMC fractions was determined by the filtration analysis with a pressure drop of 1 atmosphere absolute pressure. Table 1 gives the results. As may be seen, the fractionation tends to show a heterogeneity of the CMC with respect to the degree of polymerization and esterification. The properties of the fractions change according to rules with the order of the isolation of the latter: lower polymerized fractions are esterified in a higher degree. The fractions produced by precipitation are not of equal value with respect to their stabilizing properties. It was also shown that the gel-like phase has only a weak stabilization and effect. Besides the degree of polymerization and esterification this must be taken into account. The ratio of the gel- and sol-like phase is not only important when used as a stabilizer of loam solutions. The gel-like phase is the most effective when using it as a glue. There are 1 table and 7 references, 4 of which are Soviet.

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SOV/20-123-2-22/50

Production of Carboxy-Methyl Cellulose Fractions and Investigation of Its Physical and Chemical Properties

ASSOCIATION:	Moskovskiy neftyanoy institut im. I. M. Gubkina (Moscow Petroleum Institute imeni I. M. Gubkin)
PRESENTED:	July 3, 1958, by A. V. Topchiyev, Academician
SUBMITTED:	July 1, 1958

Card 4/4

[illegible]

ACCESSION NR: [illegible]

SOURCE: [illegible] zh. Fiz. Abs. 4A[illegible]

AUTHORS: Timokhin, L. A.; Trubnikov, V. R.; Zherebtsov, V. A.

TITLE: Adders for recording systems of analyzers with ferrite core memory

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radio- [illegible]

TOPIC TAGS: computer component, binary code, binary decoder, mag-netic core storage, ferrite memory core 16C

TRANSLATION: The circuit and operation of binary and decimal adders are described. The circuits are based on the ferrite-diode current-distributor principle. Their possible use in recording systems of analyzers having ferrite-core memories is discussed. Two ferrite

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ACCESSION NR: AR4039893

cores per digit are used in the binary adder circuit. The cores are initially set at zero by current flow through the clearing windings such that the even cores are energized and the odd ones clear relative to the inquiry current. There are two inquiry inputs to the adder. When a current pulse is applied to one of them (input I), the code of the unchanged number is produced, and when a current pulse is applied to input II, the number increased by unity is delivered. Thus, the addition of unity is carried out in a single inquiry step. The inquiry windings and the current-distribution circuits are connected in series and are excited from a single generator. The generator current pulse duration is 5 microseconds. The decimal adder consists of a decoder and coder, each made of eight ferrite cores. The cores of the coder are simultaneously the cores for the digit current switching circuit. Four pairs of de[illegible] produce a single decimal [illegible] expressed in terms of [illegible] numbers. There are two current-distribution circuits. The adder is excited from two inputs. In one case the code of the

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ACCESSION NR: AR4039893

number from the decoder cores is transferred to the coder cores without change. When input II is excited, the numbers are transformed from binary-decimal into linear code. The circuit diagrams [illegible] of the [illegible] are presented. [illegible]

SUB CODE: DP ENCL: 00

Card 3/3

L 6926-65 EWT(d)/EEC(k)-2/EWP-3 Pg-4/Pk-4/Po-4/Pq-4 IJP(c)/SSD/AFWL/AFETR(t)/
ASD(a)-5/BSD/AFMD(p)/AFCC(b)/ESD(c)/ESD(dp)/ESD(gs)/RAEM(t) GS/BB
ACCESSION NR: AR4039894 S/0058/64/000/004/A029/A029

77

SOURCE: Ref. zh. Fiz., Abs. 4A301

AUTHORS: Timokhin, L. A.; Trubnikov, V. R.; Kulabukhov, Yu. S.

TITLE: Recording system for a pulse height analyzer with ferrite core memory

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektronike. T. 2. Ch. 2. M., Gosatomizdat, 1963, 47-52

TOPIC TAGS: pulse height analyzer, digital recording system, magnetic core storage, ferrite core memory, binary coding, memory access technique, ferrite matrix

TRANSLATION: A description is presented of the recording system of a pulse-height analyzer with ferrite-core memory, based on a current coincidence method. In any of the operating conditions of the re-

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cording unit it is possible to break up the memory, with the aid of the address, into two, four, or eight groups of 126, 64, and 32 channels respectively. The address circuit makes it possible to go through the channels in both forward and backward directions. A transformerless matrix drive is used to eliminate the dependence of [illegible] Separate [illegible] The wires in each matrix plane are [illegible] that for writing, respectively). The coding system is binary-decimal. The addition method is sequential with variable cycle. The use of a Z register in the arithmetic unit has eliminated the need for access to the adder during the [illegible] of the data and has made it possible [illegible] and writing currents. The diagram [illegible] register position and the [illegible] system [illegible] time:

L 6926-65
ACCESSION NR: AR4039894

an oscilloscope, neon lamps, and a digital printer. Systems were developed for 128 channels with a capacity of 10^5 and 256 channels with a capacity of 10^6. M. Vishnevskiy.

ENCL: 00

Card 3/3

[illegible]

ACC NR: AR6017192 SOURCE CODE: UR/0058/65/000/012/A031/A032

AUTHOR: Ivanov, A. A.; Kulabukhov, Yu. S.; Timokhin, L. A.

21
B

TITLE: A converter of short time intervals with increased linearity

SOURCE: Ref. zh. Fizika, Abs. 12A309

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 15-19

TOPIC TAGS: analog digital converter, pulse code modulation, trigger circuit, tunnel diode

ABSTRACT: The authors describe a converter of short time intervals into a digital code, ensuring an increased linearity and at the same time sufficiently simple circuitry. The converter has no prior "stretching" of short time intervals. The time interval is measured directly by comparison with a number of cycles of oscillations of a known frequency. This method is widely used in microsecond devices, but owing to the lack of reliable high-speed trigger circuits, counting devices, etc., it could not be adopted for the nanosecond region. Such a possibility has been uncovered by the appearance of tunnel diodes with sufficiently high speed. The reference frequency is chosen to be 100 Mcs. To reduce a time channel up to 5 nsec by a factor of 2 compared with the period of the reference series, a special additional device is introduced into the converter circuit. The complete schematic diagram of the converter and different time diagrams illustrating its operation are presented. L. S. [Translation of abstract]

SUB CODE: 20, 09

Card 1/1 sla

L 34793-66 EWT(1)

ACC NR: AR6017199 SOURCE CODE: UR/0058/65/000/012/A033/A033

AUTHOR: Matalin, L. A.; Timokhin, L. A.; Utyuzhnikov, A. N.; Florentsev, S. N.

TITLE: 64-channel pulse-height analyzer with average dead time of 1 μsec

SOURCE: Ref. zh. Fizika, Abs. 12A316

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 136-146

TOPIC TAGS: pulse height analyzer, digital analog converter, pulse counting, computer memory, binary code, arithmetic unit, memory address

ABSTRACT: The authors present a detailed description of a 64-channel analyzer with average dead time of the order of 1 μsec, intended for operation with input pulses of both polarities and with rise time 0.2 - 0.5 μsec. The range of positive pulses is 0 - 100 v, and that of negative pulses 0 - 10 v. The analyzer operates in the following manner. The input signal is transformed into a proportional time interval by the linear discharge method. This interval is modulated by a measuring series of 10 Mcs, which is read by a rapid address counter. After termination of the conversion, the binary code of the address in parallel form is transferred through gates into an address register, which controls the drive of a fast memory with a dead time interval of 1.25 μsec and with a channel capacity of 4 binary digits. The storage in the rapid memory is with the aid of a fast arithmetic unit, the overflow signal of which transfers, through the gates, the code of the corresponding address into

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L 34793-66

ACC NR: AR6017199

the register of the main memory (ferrite-core) with effective resolution time of 10 μsec. The control circuit of the analyzer is so constructed that the fast address counter, the address register of the fast memory, and the register of the main memory are used for additional equalization. L. S. [Translation of abstract]

SUB CODE: 09

Card 2/2 92

L 34789-66 EWT(1)

ACC NR: AR6017201 SOURCE CODE: UR/0058/65/000/012/A033/A033

24
B

AUTHOR: Kulabukhov, Yu. S.; Timokhin, L. A.; Trubnikov, V. R.

TITLE: Multichannel time selector with a range of seconds

25

SOURCE: Ref. zh. Fizika, Abs. 12A318

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 160-164

TOPIC TAGS: multichannel analyzer, time interval counter, ferrite core memory, data readout

ABSTRACT: The article describes a 120-channel time selector for the intervals of the order of seconds, employing one accumulating counter with a dead time 0.5×10^{-6} sec and a ferrite-core memory which is common to all channels. The channel width is set by means of a quartz oscillator and can be set at 10^{-2}, 10^{-1}, 1, 10, and 10^{2} sec. The uncertainty in the channel position relative to the starting pulse is 10^{-3} sec. Provision is made for automatically switching the channel width in accordance with a pre-established program in groups of ten channels each. The readout of the accumulated data is with an oscilloscope and a number printer. The block diagram of the selector is presented and the operation of its individual units described. The practice of one year's operation of the selector has shown that its measuring characteristics are stable and all the units operate reliably. To illustrate the operation of the instrument, a plot of the intensity of delayed neutrons against time, obtained with the selector for the fission of U^{235} by 6-Mev neutrons, is presented. L. S. [Translation of abstract]

SUB CODE: 09,20

Card 1/1

L 3192-66 EWT(d)/EED-2/EWP(1) IJP(c) BB/GG

ACCESSION NR: AP5011874

UR/0120/65/000/002/0077/0083
621.382.2:681.142.65

AUTHOR: Timokhin, L. A.44; Florentsev, S. N.44

29
83

TITLE: Storage unit based on tunnel diodes

16C,44

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1965, 77-83

TOPIC TAGS: tunnel diode storage, tunnel diode, storage unit, storage cell, computer component

ABSTRACT: The use of tunnel diodes as the basic elements of a storage unit with internal selection is examined. Expressions are derived for the allowable spread of diode characteristics, matrix drive, and registration system for a 64-channel unit with a capacity of 4 bits per channel. The structure of the registration system is similar to other systems with internal selection. The circuit of the decoder and drive of one matrix coordinate is shown in Fig. 1 of the Enclosure. In the initial state, both diodes are reverse biased by current I_0 passing through R_0. Negative voltages of the address code through R_1, R_2, R_3, forward bias the diode by a current value I_c for each level. (The resistances are selected so

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L 3192-66

ACCESSION NR: AP5011874

that $3I_c = I_o$.) The selection of a given coordinate corresponds to the arrival of the three negative current levels. At the instant of reading, a control pulse I_y (through R_4) switches the diode to the high-voltage state, increasing the operating current, and a positive voltage pulse is formed at the transformer output winding W_3. The difference current between the central pulse and the operating current saturates transistor T_1. In the writing operation, the central pulse is fed to the second diode, and a negative voltage pulse is formed at W_3. With R_2 tunnel diodes the following current values are obtained: $I_o = 9.35$ mamp, $I_c = 2.94$, and $I_y = 5.72$ mamp. For reading and writing pulses, duration is 0.5 μsec, with a rise time of 0.15 μsec and a height of 7.5±0.225 v. The entire register system is mounted on five panels (360 x 260 mm^2). Four of the panels carry the matrix planes; each containing 64 cells and a reading amplifier. The fifth panel carries the decoder, the drive and accumulator, and the control circuit. The system operates reliably with a maximum clock frequency of 800 kc at 15—35C and employs diodes of similar characteristics. The speed of operation is limited by the drive, although the matrix and the adder are capable of higher speeds. Orig. art. has: 8 figures and 26 formulas. [PW]

ASSOCIATION: none

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L 3192-66

ACCESSION NR: AP5011874

SUBMITTED: 10Feb64

ENCL: 01

SUB CODE: DP, EC

NO REF SOV: 001

OTHER: 005

ATD PRESS: 4023

Card 3/4

L 3192-66

ACCESSION NR: AP5011874 ENCLOSURE: 01

O

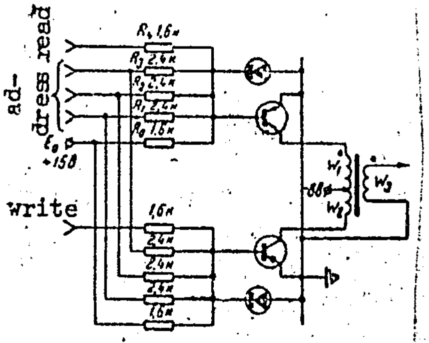

Fig. 1. Circuit of decoder and drive of one matrix co-ordinate

PC

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L 2773-66 EWT(m)/T IJP(c)

ACCESSION NR: AP5021339 UR/0120/65/000/004/0100/0106

539.283.078

37
43
B

AUTHOR: Matalin, L. A.; Smirnov, V. I.; Timokhin, L. A.; Chubarov, S. I.

TITLE: The reduction of counting losses in multichannel recorders by preliminary grouping of events

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 100-106

TOPIC TAGS: multichannel analyzer, nuclear radiation spectrometer, pulse counter, pulse counting, group theory

19

ABSTRACT: The majority of registering devices used in nuclear spectrometry exhibit fixed dead time τ. Pulse equalization devices are able to improve somewhat the situation and the quantity $N_{inp}\tau$ (equal to the ratio of the average rate of input pulse arrivals (N_{inp}) to the maximum possible registtation rate $N_{pmax} = 1/\tau$) may attain a magnitude $\leq 0.5-0.7$. New experiments now require rates corresponding to $N_{inp}\tau \gtrsim 1$. The present authors studied an approach to counting loss reduction during the registration of statistically distributed pulses by introducing preliminary grouping of events. A theoretical analysis described in detail in the present paper shows that a simultaneous use of grouping and equilization devices substantially reduces the influence of the magnitude

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L 2773-66

ACCESSION NR: AP5021339

of the dead time on the size of counting losses. Calculations of the effective dead time are carried out for the case of three types of recorders (with arbitrary choice of addresses, consecutive choice of addresses, and address recording) joined with preliminary grouping devices. The theoretical results of the article are incorporated in two multichannel analyzers described elsewhere. "The authors thank V. G. Zolotukhin and I. Ye. Bochareva for their help in the design of the grouping system and A. A. Ivanov for numerous critical remarks during the investigation." Orig. art. has: 33 formulas, 4 figures, and 6 tables.

ASSOCIATION: Fiziko-energeticheskiy institut GKAE, Obninsk (Physics-Power Institute, GKAE)

SUBMITTED: 05Jun64 ENCL: 00 SUB CODE: NP, MA

NO REF SOV: 007 OTHER: 001

Card 2/2

ANUFRIYENKO, V.B.; DEVKIN, B.V.; KOTEL'NIKOVA, G.V.; KULABUKHOV, Yu.S.; LOVCHIKOVA, G.N.; SAL'NIKOV, O.A.; TIMOKHIN, L.A.; TRUBNIKOV, V.R.; FETISOV, N.I.

Inelastic scattering of 14 Mev. neutrons and the nuclear level density. IAd. fiz. 2 no.5:826-838 N '65. (MIRA 18:12)

L 20720-66 EWT(l)/EWT(m)/ETC(m)-6 DIAAP/IJP(c) WW
ACC NR: AP6007812
SOURCE CODE: UR/0120/66/000/001/0053/0061

AUTHOR: Anufriyenko, V. B.; Devkin, B. V.; Ivanov, A. A. Kotel'nikova, G. V.; Kulabukhov, Yu. S.; Lovchikova, G. N.; Sal'nikov, O. A.; Timokhin, L. A.; Fetisov, N. I.

44
36

ORG: Institute of Physics and Power Engineering, GKAE (Fiziko-energeticheskiy institut GKAE)

B

TITLE: Neutron transit-time spectrometer

17

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 53-61

TOPIC TAGS: spectrometer, neutron spectrometer

ABSTRACT: A new fast-neutron transit-time spectrometer is described which can measure a neutron spectrum from 100 kev to 14 Mev. Monochromatic 14-Mev neutrons are produced by a $T^3(d, n)He^4$ reaction; deuteron energy, 250 kev; deuteron-pulse duration, 7 nsec; beam interruption before acceleration is used (skotch supplied). The neutron detector and electronic equipment are briefly described. The spectrometer resolution determined from a δ-peak is 4 nsec/m; channel width, 2.12 nsec; integral nonlinearity, 0.25%. From a time-to-pulse-height converter, the signals are fed to a 256-channel analyzer. The resolution time is 8 nsec; transit base, 2 m; linear dynamic range, 400 nsec. The photomultiplier is equipped with a noise-elimination device, and the detector is well protected from the background noise,

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UDC: 539.1.078:539.125.5

2

L 20720-66

ACC NR: AP6007812

8

both features ensuring a high effect-to-background ratio when 100-kev neutrons are measured. The spectrometer operation is illustrated by a spectrum of neutrons inelastically scattered by Mn."In conclusion, the authors wish to thank B. S. Novikovskiy and Ye. P. Ukraintseva for tending the accelerator operation, V. G. Zolotukhin for discussing the spectrometer efficiency, and N. S. Biryukov, M. D. Bityutskaya, V. A. Rumyantseva, A. M. Trufanov, and Ye. S. Chernichenko for their part in measurements and data processing." Orig. art. has: 9 figures and 3 formulas. [03]

SUB CODE: 18, 09 / SUBM DATE: 11Jan65 / ORIG REF: 004 / OTH REF 006/ ATD PRESS: 4223

Card 2/2

ACC NR: AR6021238 SOURCE CODE: UR/0271/66/000/003/B059/B059

AUTHOR: Timokhin, L. A.; Trubnikov, V. R.

TITLE: A 256-channel ferrite core storage system

16C

SOURCE: Ref. zh. Avtomat telemekh i vychisl tekhn, Abs. 3B490 /

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 75-81

TOPIC TAGS: computer memory, ferrite core memory, magnetic core storage, computer storage

ABSTRACT: A memory system for use in nuclear particle spectrometry is described. It may accept data from any measuring devices. The memory unit is based on magnetic cores with two-cores-per-bit and triple current coincidence selection. The matrix input uses a magnetic core switching unit which combines the functions of switching and binary coded address decoding. The capacity of each channel is $2^{16} - 1$. Both the address counter and the arithmetic unit are based on flip-flops which permit serial or parallel control. Provisions are made for forward or reverse address cycling, both arithmetic unit operating modes (addition and subtraction), and dividing the channels into two groups. The data may be delivered into an electron beam tube or the SDM-107 typewriter. [Translation of abstract] 5 illustrations. V. L.

SUB CODE: 09, 20

Card 1/1 UDC: 681.142.4

ACC NR: AP6013488 UR/0120/66/000/002/0022/0027

AUTHOR: Mogil'ner, A.I.; Sal'nikov, O.A.; Timokhin, L. A.

ORG: None

TITLE: A correlation method of energy spectra measurement of nuclear particles by their fly-by time

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1966, 22-27

TOPIC TAGS: neutron , neutron beam , neutron energy distribution ~~spectrum measurement~~, ~~correlation~~ neutron spectrum, ~~study, digital random sequence~~ generator

Abstract: This paper proposes and describes a correlation method for the measurement of the energy spectrum of neutrons. A new method was needed because of some basic drawbacks of the classical method, which causes a conflict between the spectroscope resolving and light-gathering power. In the approach to the new method, the spectroscope is considered as a linear system with a modulated neutron beam input and a velocity-of--counting detector output. On this basis, it is shown that by using an optimum pseudo-random digital modulation sequence, with its autocorrelation sequence approaching that of a white noise, cycled at a sufficiently slow repetition rate, the measurement of the crosscorrelation function between the velocity of counting (output) and the modulating signal produces the impulse response of the spectrometer. This impulse response is, however, approximately equal to the desired normalized time spectrum of the neu-

Card 1/2 UDC: 539.121.64

ACC NR: AP6013488

trons, multiplied by a constant. Thus no special measurement of the backgound noise is required. The generator of the backgound sequence, described in some detail, is based upon numerical techniques using the code shift register with linear constraints. It generates + 1 and - 1 sequences of random duration with periods of e.g $(2^d - 1)$ where d is an integer as large as 34. A statistical analysis of the method's precision is given. An experimental verification of the method was conducted on a nuclear heat generator at zero power which had an approximately Maxwell neutron spectrum. The correlation method was compared with the classical one. The correlation method was better than the classical one not only at high backgound noise, but also near the spectrum maxima. Authors thank S.I. Chubarov and L.A. Matalin for a discussion of results and valuable comments. Orig. art. has: 7 figures and 24 formulas.

SUB CODE: 20, [redacted] SUBM DATE: 24Jun65 ORIG REF: 002 OTH REF: 006

Card 2/2

IMOKHIN, M., zaveduyushchiy.

Important construction works in the cities of the Pskov Province. Zhil.-kom.khoz. 3 no.3:4-5 Mr '53. (MLRA 6:5)

1. Pskovskoy oblastnoy otdel kommunal'nogo khozyaystva.
(Pskov Province--Construction industry)

TIMOKHIN, M.Ya.

Making wall slabs from wood waste. Rats. i izobr. predl. v stroi. no.96: 14-15 '54. (MLRA 8:7)

1. Trest Mosgrazhdanuglezhilstroy Ministerstva ugol'noy promyshlennosti.
(Walls) (Wood waste)

TIMOKHIN, N.

Utilization of keratin waste. Leg.prom. 18 no.7:56-3 of cover Jl '58.
(MIRA 11:9)
(Keratin)

TIMOKHIN, N.

Semiautomatic production line for making skin glue. Mais.
ind. SSSR 32 no.1:49 '61. (MIRA 14:7)
(Glue)

TIMOKHIN, N.A.; KLYUCHEVSKAYA, V.V.

Introduction of completed research work into light industry.
Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform.
no.11:92-93 '62. (MIRA 15:11)
(Research, Industrial)

27

C. A.

More wool, bristles, and hide glue. N. A. Timokhin. *Legkaya Prom.* 10, No. 7, 11-12(1950).—A flow sheet is presented for the production of hide glue by the skimming of cooled broth.
Marshall Sittig

TIMOKHIN, N.A.; VIRNIK, D.I.

The experience acquired by the gelatine industry should be placed at the disposal of the leather industry. Leg. prom. 15 no.11:33-34 N '55. (MIRA 9:2)
(Leather industry) (Gelatine)

ZHULIN, A.; TIMOKHIN, N. A.

In the Technical Council. Leg.prom. 15[i.e. 16] no.6:3 of cover Je '56. (MLRA 9:8)
(Leather industry)

TIMOKHIN,N.A.; KOPEYKIN,V.S.

[redacted]

Unhairing by a solution under pressure. Leg.prom. 15 no.6:41-44 Je '55. (MIRA 8:8)

(Hides and skins)

TIMOKHIN, N.A.; IVANOV, Yu.V.

Drying and moisturing units used in the leather industry. Biul.tekh.-ekon.inform. no.5:46-47 '58. (MIRA 11:7)
(Leather industry--Equipment and supplies)

FRIDLYAND, Aleksandr Adol'fovich; NIKITIN, Georgiy Nikolayevich;
TIMOKHIN, N.A., retsenzent; RAZUMOVSKAYA, Ye.V., red.

[Additional production from the wastes of leather and fur manufacture] Dopolnitel'naia produktsiia iz otkhodov kozhevennogo i mekhovogo proizvodstva. Moskva, Legkaia industriia, 1965. 211 p. (MIRA 18:12)

LEVENKO, P.I.; TIMOKHIN, N.A.; GLANTS, I. Yo.

Prospects of the utilization of protein raw materials from hides and skins. Kozh.-obuv. prom. 7 no. 11:9-11 N '65
(MIRA 19:1)

TIMOKHIN, N.A.

Introducing the results of research on new equipment and materials in the enterprises of the shoe and leather industry of the North Caucasus Economic Council. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 18 no.10:61-62 0 '65. (MIRA 18:12)

TIMOKHIN, N.A.

Efficient utilization of raw materials for the production of hide glue. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh. inform. 18 no.9:52-53 S '65. (MIRA 18:10)

TIMOKHIN, [illegible]; [illegible], V.V.

Out-of-town session of the Scientific Council of the Various Branches of the Light Industry of the Middle Volga Economic Region. Kozh.-obuv.prom. 7 no.3:34-35 Mr '65.

(MIRA 18:10)

TIMOKHIN, N.A.; KRYUKOVA, A.G.

Introducing the APK-4 unit for spray painting of skins. Biul. tekh-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 18 no.6:46-47 Je '65. (MIRA 18:7)

TIMOKHIN, N.A.; KLYUCHEVSKAYA, V.V.

In the Scientific Council of Light Industry. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. 17 no.11 78-80 N '64. (MIRA 18:3) [illegible] 0047

1
8

AUTHORS: Timokhin, N. A.; Kryukova, A. G.

44

TITLE: Introduction of unit APK-4 for surface coloring of leathers

SOURCE: Byulleten' tekhniko-ekonomicheskoy [illegible]

TOPIC TAGS: leather, dye, paint, automatic machine

ABSTRACT: Unit APK-4 for spray-dyeing of chrome leathers with water soluble pig- [illegible] Gribanovskiy mashinostroitel'nyy zavod (Gribanov Machine Construction Plant) 24 It constitutes [illegible] spraying chambers, four drying sections, a [illegible]. A mesh conveyor [illegible]

L 61117-65

ACCESSION NR: AP5018211

3

plastic inserts. The unit is working successfully at the Ostashkovskiy [illegible]

[illegible]

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: IE

TIMOKHIN, N.A.; KLYUCHEVSKAYA, V.V.

Introduction of new equipment and advanced technology in the enterprises of the leather and shoe industry of the Middle Volga Economic Council. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. infrom. 18 no.2:13-15 F '65.
(MIRA 18:5)

TIMOKHIN, N. A. MOZHAYEV, P. F.

Complete utilization of the wastes of natural leather from the leather industry. Kozh. obuv. prom. 5 no. 12:15-17 D '63. (MIRA 17:5)

TIMOKHIN, N.A.

Primary processing of hides and skins. Biul.tekh.-ekon.inform. Gos.nauch.-issl.inst.nauch.i tekh.inform. no.12:70-72 '63.
(MIRA 17:3)

TIMOKHIN, N.A., nauchn. red.

[Dehairing of hides and skins in the manufacture of chrome tanned leather for shoe uppers; materials] Obezvolashivanie shkur pri vyrabotke kozh khromovogo dubleniia dlia verkha obuvi; materialy. Moskva, Gos.nauchno-issl. in-t nauchn. i tekhn. informatsii, 1964. 67 p. (MIRA 18:4)

1. Seminar po obmenu opytom obezvolashivaniya i zoleniya kozhevennogo syr'ya pri proizvodstve kozh dlia verkha obuvi, Moskva, 1963. 2. Glavnyy spetsialist Gosudarstvennogo komiteta Soveta Ministrov RSFSR.

TIMOKHIN, N.A.

Efficient utilization of the wastes of leather industries.
Kozh.-obuv. prom. 6 no.2:14-18 F'64. (MIRA 17:5)

TIMOKHIN, N.A.; BARINOV, I.G.

Visiting session of the Scientific Council for the Light Industry at the Volga-Vyatka Economic Council. Biul.tekh.-ekon.inform.Gos. nauch.-issl.inst.nauch.i tekh.inform. 16 no.8:70-72 '63. (MIRA 16:10)

TIMOKHIN, N. A.

Using waste products from the leather and fur industries in the food and mixed-food industries. Biul. tekh.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekh. inform. no.12:69-70 '62. (MIRA 16:1)

(Factory and trade waste)

TIMOKHIN, N.A.

Using hydrodynamic action and ultrasonic waves in enterprises of
light industry. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.-
i tekh.inform. no.7:49-52 '62. (MIRA 15:7)
(Ultrasonic waves--Industrial applications) (Vibration)

TIMOKHIN, N.A.

Interplant school for chrome-emulsion tanning. Biul.tekh.-ekon. inform. no.10:60-61 '61. (MIRA 14:10)
(Tanning--Study and teaching)

TIMOKHIN, N.A.; BARINOV, I.G.; KRAMINOVA, K.G.

Interfactory school for studying the chrome-emulsion tanning method. Kozh.-obuv.prom. 3 no.8:15-16 Ag '61. (MIRA 14:10)
(Tanning)

TIMOKHIN, Nikolay Andreyevich; VOLKOV, V.A., inzh., retsenzent; PAVLOV, S.A., doktor tekhn.nauk,prof., nauchnyy red.; PLEMYANNIKOV, M.N., red.; ZOLOTAREVA, I.Z., tekhn. red.

[Manufacture of hide glue; new techniques, overall mechanization, and automation of production]Proizvodstvo mezdrovogo kleia; novaia tekhnologiia, kompleksnaia mekhanizatsiia i avtomatizatsiia proizvodstva). Moskva, Rostekhizdat, 1962. 147 p. (MIRA 15:9)

(Glue) (Automation)

TIMOKHIN, N.A.; SHUBIN, N.A.

Semiautomatic production line in the manufacture of hide glue.
Kozh.-obuv.prom. 3 no.7:13-15 Jl '61. (MIRA 14:9)
(Glue) (Assembly-line methods)

TIMOKHIN, N.A.

Using ultrasonic waves in tanning chrome leather with chrome emulsions.
Biul.tekh.-ekon.inform. no.1:45-46 '61. (MIRA 14:2)
(Tanning) (Ultrasonic waves--Industrial applications)

NOVIKOV, V.S.; TIMOKHIN, N.A.

New method for flaying cattlehides and pigskins. Kozh.-obuv. prom. 2 no. 11:28-30 N '60. (MIRA 13:12)
(Hides and skins)

TIMOKHIN, N.A.

Conference on exchange of experience in designing new equipment for the leather, fur, and shoe industries. Biul.tekh.-ekon.inform. no.9: 74-75 '60. (MIRA 13:10)

(Leather industry--Equipment and supplies)
(Shoe machinery)
(Fur--Dressing and dyeing)

TIMOKHIN, N.A.

Interfactory school for studying over-all mechanization and automation in the leather and fur industry. Biul.tekh.-ekon.inform. no.11: 68-69 '60. (MIRA 13:11)
(Leather industry--Technological innovations)
(Fur--Dressing and dyeing) (Automation)

NOVIKOV, V.S.; TIMOKHIN, N.A.

All-Union Scientific and Technical Conference on the Dissemination of Work Practices in the Field of New Leather Technology. Kozh.-obuv.prom. 2 no.5:37-38 My '60. (MIRA 13:9)
(Leather)

NOVIKOV, V.S.; TIMOKHIN, N.A.

Results of the All-Union Scientific and Technical Conference
of light Industry Workers. Kozh.-obuv.prom. 2 no.8:37-38
Ag '60. [redacted] (MIRA 13:9)
(Leather industry) (Shoe industry) (Fur)

TIMOKHIN, N.A.

Using sonic and ultrasonic vibrations in industry. Kozh.-obuv. prom. no.3:16-19 Mr '59. (MIRA 12:6)
(Vibration) (Russia--Manufactures)

TIMOKHIN, N.A.

Using ultrasonic techniques in the light industry. Biul.tekh.-ekon.inform. no.1:46-47 '59. (MIRA 12:2)
(Ultrasonic waves--Industrial applications)

1. MEYERSON, G. M., TIMOKHIN, H. N., BURIKHIN, N. N.

2. USSR (600)

4. Irrigation Farming

7. Agronomic principles of crop rotations in new irrigated districts. Sov. agron. 11 no. 3, 1953

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

MEERSON, G. M., TIMOKHIN, P. A., BURIKHIN, N.N.

Rotation of crops.

Agronomic principles of crop rotations in new irrigated districts, Sov. agron. 11, no. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

TIMOKHIN, P.Ya., inzh.

Methodology for treating the test results of waste-heat boilers.
Prom.energ. 17 no.4:12-16 Ap '62. (MIRA 15:4)
(Boilers--Testing)

TIMOKHIN, P.Ya., inzh.

Operation of waste-heat boilers. Trudy NTO chern. met. 20:311-318 '60.
(MIRA 13:10)

1. Yuvenergochermet.
(Boilers) (Open-hearth furnaces)

TIMOKHIN,P.Ya., inzhener

[redacted]

Accurate determination of the values of air intake in boiler calculations. Teploenergetika 2 no.3:56-58 Mr '55.
(MIRA 8:9)

1. Yuvenergometallurgprom
(Boilers)